

IN THE CLAIMS:

Please amend the claims as follows.

1-14. (Cancelled)

15. (Currently amended) An infrared ("IR") thermography imaging system comprises:

at least one lamp configured to heat a surface of an object to be imaged;

at least one active quenching means configured to quench said at least one lamp, wherein said active quenching means is configured to receive a control signal T2 and to quench said lamp in response to the control signal T2; and

an IR camera configured to capture a plurality of IR image frames of the object.

16. (Currently amended) The IR thermography imaging system of Claim 15, wherein said active quenching means is further configured to receive an initial control signal T0 ~~and a control signal T2~~, and wherein said active quenching means is further configured to allow a current flow I to said lamp in response to the initial control signal T0 ~~and to quench said lamp in response to the control signal T2~~.

17. (Original) The IR thermography imaging system of Claim 16, wherein said active quenching means comprises a high-voltage, high current switch, wherein said high-voltage, high current switch closes in response to the initial control signal T0 and opens in response to the control signal T2.

18. (Original) The IR thermography imaging system of Claim 17, further comprising a timing generator configured to supply the initial control signal T0 and the control signal T2 and to supply a lamp trigger signal T1, wherein said lamp is activated in response to the lamp trigger signal T1.

19. (Original) The IR thermography imaging system of Claim 16, wherein said active quenching means further comprises a switch drive circuit configured to receive a logic level signal and to generate a switch-drive signal in response, wherein the control signal T2 is a logic level signal, and wherein said high-voltage, high current

switch opens in response to the switch-drive signal that corresponds to the control signal T2.

20. (Original) The IR thermography imaging system of Claim 19, wherein the switch-drive signal is a switch-drive voltage signal.

21. (Original) The IR thermography imaging system of Claim 17, wherein said high-voltage, high current switch comprises a power semiconductor switch.

22. (Original) The IR thermography imaging system of Claim 17, wherein said high-voltage, high current switch comprises an insulated gate bipolar transistor.

23. (Original) The IR thermography imaging system of Claim 22, wherein said lamp comprises a halogen lamp.

24. (Original) The IR thermography imaging system of Claim 22, wherein said lamp comprises a flash lamp.

25-27. (Cancelled)

Please add the following new claims.

28. (New) The IR thermography imaging system of Claim 21, wherein the power semiconductor switch is selected from the group consisting of a silicon controlled rectifier, a gate turn-on thyristor, a MOSFET, a insulated gate commutated thyristor ("IGCT"), and combinations thereof.

29. (New) The IR thermography imaging system of Claim 15, wherein said lamp comprises an arc lamp.